

Via Email

May 13, 2022

NC DOT Geotechnical Engineering Unit
1020 Birch Ridge Drive
Raleigh, North Carolina 27610

Attention: Mr. Gordon Box, LG

Re: NC DOT Inspector Training Guidance
Davidson Asbestos Site
NC DOT State Project No. U-5907
WBS Element #46452.1.1
Davidson, Mecklenburg County, North Carolina
H&H Job No. ROW-605

Dear Gordon:

1.0 Introduction

Hart & Hickman, PC (H&H) has prepared this letter to provide training guidance for NC DOT inspectors related to asbestos-contaminated soil (ACS) prior to a proposed sidewalk and roadway improvement project in Davidson, Mecklenburg County, North Carolina. The sidewalk and roadway improvement activities will be conducted on multiple parcels located along Potts Street, Sloan Street, Griffith Street, and Beaty Street in Davidson, NC.

The NC DOT project includes proposed roadway and sidewalk improvements, installation of stormwater drainage ditches and stormwater drainage piping and catch basins. The roadway improvements include construction of a new road that extends Potts Street to Sloan Street, which connects with a new roundabout at the intersection of Sloan Street, Griffith Street, and Beaty Street. A project location map is included as Figure 1, and an aerial project map is presented as Figure 2.

Mr. Gordon Box, LG

May 13, 2022

Page 2

Previous assessments conducted by others verified the presence of ACS on the former asbestos mill property and in the residential neighborhood surrounding the former mill. Analytical results of soil samples collected by H&H during 2019 Phase II assessment activities indicate widespread ACS exists within proposed NC DOT project work areas. Laboratory analytical results from the Phase II activities indicate that asbestos was present in soil for 40 out of 105 soil borings conducted during this assessment. Buried asbestos containing material (ACM) was only detected in one location. For proposed NC DOT work areas, the buried ACM (asbestos-containing floor tile) was only detected near the new road extension at Sloan Street.

Appropriate safety precautions and procedures should be implemented for the sidewalk, road construction, and drainage/piping work within ACS or ACM areas. ACS that is disturbed or removed during construction activities should be properly managed by accredited personnel and disposed at a permitted facility. H&H has developed a Soil Management Plan (SMP) to assist NC DOT's construction contractor during the road and sidewalk construction activities. During construction activities, NC DOT's construction contractor will establish Regulated Areas where ACS or ACM disturbance may occur. H&H is providing this training guidance for NC DOT inspectors who will enter Regulated Areas or for NC DOT staff who visit the project area (outside of Regulated Areas) during the sidewalk and roadway improvement activities.

2.0 Training Requirements

Two NC state government agencies responsible for regulations regarding exposure to asbestos include the NC Department of Health and Human Services (DHHS) Health Hazards Control Unit (HHCU) and the North Carolina Department of Labor. The DHHS HHCU accredits individuals performing asbestos management activities such as inspection, design, and removal; approves asbestos training courses; issues permits for asbestos removal projects; issues demolition notifications; inspects asbestos removal projects; implements the management of ACMs in schools; and investigates citizen complaints. The NC Department of Labor has adopted the federal Occupational Safety and Health Administration (OSHA) *General Industry Standard*

Mr. Gordon Box, LG

May 13, 2022

Page 3

(29 CFR 1910.1001) and the *Construction Standard* (29 CFR 1926.1101) regulations and is responsible for their enforcement of worker protection in NC.

Considering both NC HHCU and OSHA regulations, personnel who enter Regulated Areas where ACS (with any amount of asbestos detected in soil), known ACM, or suspected ACM will be disturbed must be trained and maintain accreditation by the HHCU. Based on discussions on January 7, 2022, between H&H and Mr. Jeffery Dellinger, Industrial Hygiene Consultant Supervisor with HHCU, ACS containing greater than or equal to 0.25% asbestos is considered a hazard and shall be managed by accredited personnel. In addition, because the OSHA *General Industry Standard* (29 CFR 1910.1001) and *Construction Standard* (29 CFR 1926.1101) indicate that no employee shall be exposed to an airborne concentration of asbestos in excess of 0.1 fiber per cubic centimeter of air as an 8-hour time-weighted average (TWA), personnel accredited as Asbestos Supervisors and Asbestos Workers will also be required for management of ACS that is less than 0.25 % asbestos. As such, NC DOT inspectors who enter Regulated Areas where ACS or ACM is disturbed must be trained and accredited by the HHCU.

Asbestos training courses are offered in multiple disciplines: Abatement Worker, Abatement Supervisor, Inspector, Management Planner, Project Designer, etc. At a minimum, the NC DOT inspector must obtain the Asbestos Worker accreditation. Asbestos training providers and the Asbestos Accreditation Application can be found on the HHCU website (<https://epi.dph.ncdhhs.gov/asbestos/ahmp.html>). The Asbestos Worker accreditation training is typically covered in a 32-hour in-person training course. An HHCU-accredited Supervisor should also be present on-site during construction/excavation activities. The asbestos supervisor accreditation training is typically covered in a 40-hour training course.

During soil disturbing activities, all persons within the Regulated Areas shall utilize appropriate personal protection equipment (PPE), as identified in OSHA's general requirements for asbestos workers (29 CFR 1910.1001 and 29 CFR 1926.1101). PPE shall include appropriate respiratory protection with a minimum half-face respirator with high efficiency particulate air (HEPA) filtration required anytime active soil disturbance is occurring, protective full body

Mr. Gordon Box, LG

May 13, 2022

Page 4

Tyvek® suit with attached hood and booties, impermeable gloves, rubber boots, and other protective wear as appropriate based on conditions (cold stress, heat stress, insects, etc.). Respirators shall be properly fitted prior to use. Personnel shall wear proper PPE at all times within the Regulated Area. When exiting the Regulated Area workers shall proceed directly to the decontamination area and conduct decontamination procedures prior to leaving the site.

NC DOT staff who are visiting the project area (but will not enter Regulated Areas) must obtain initial training in the proper handling of materials and wastes that contain asbestos in accordance with the Two-Hour Asbestos Awareness Training required by 40 CFR 763 and 29 CFR 1926.1101. Two-Hour Asbestos Awareness training providers and courses are offered online.

3.0 Summary

Previous assessment activities conducted along Potts Street, Sloan Street, Griffith Street, and Beaty Street indicate that widespread ACS and ACM in one location are located within proposed NC DOT work areas near the Davidson Asbestos site. ACS and ACM will be disturbed during proposed sidewalk and road improvement activities near the Davidson Asbestos site. Asbestos management activities are regulated by the NC DHHS HHCU and OSHA. NC DOT construction inspectors and personnel shall obtain appropriate training and/or accreditation prior to entering Regulated Areas or visiting the project area during the sidewalk and roadway improvement activities.

Mr. Gordon Box, LG

May 13, 2022

Page 5

Should you have any questions or need additional information, please do not hesitate to call us at (704) 586-0007.

Very truly yours,

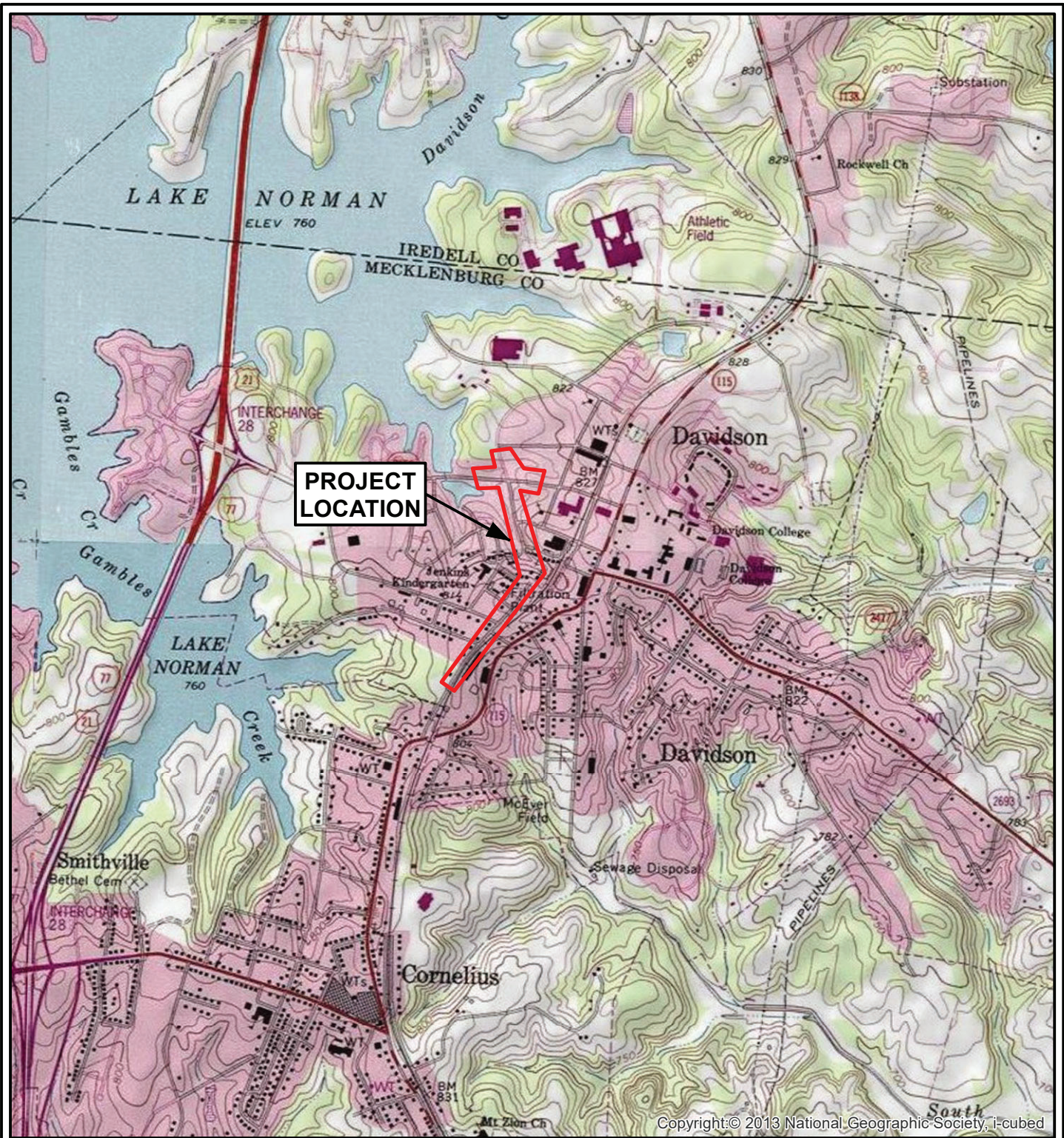
Hart & Hickman, PC

David Graham, PG
Senior Project Geologist

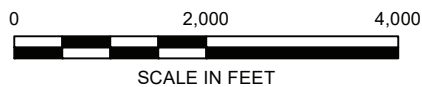
Robert Sorgel
Senior Project Geologist
NC-Accredited Asbestos Inspector

Matt Bramblett, PE
Principal

Attachments




Copyright © 2013 National Geographic Society, i-cubed



U.S.G.S. QUADRANGLE MAP

CORNELIUS AND MOOREVILLE, NORTH CAROLINA 2013

QUADRANGLE
7.5 MINUTE SERIES (TOPOGRAPHIC)

TITLE		PROJECT LOCATION MAP	
PROJECT		DAVIDSON ASBESTOS SITE DAVIDSON, NORTH CAROLINA	
 SMARTER ENVIRONMENTAL SOLUTIONS		2923 South Tryon Street - Suite 100 Charlotte, North Carolina 28203 704-586-0007 (p) 704-586-0373 (f) License # C-1269 / # C-245 Geology	
DATE: 5-13-22		REVISION NO: 0	
JOB NO: ROW-605		FIGURE. 1	

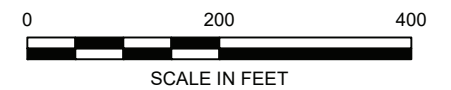


LEGEND

- SOIL BORING LOCATION WITHOUT ASBESTOS DETECTION
- SOIL BORING LOCATION WITH ASBESTOS DETECTION

NOTE:

1. BASE DATA OBTAINED FROM NC ONEMAP GIS, 2019.



TITLE
AERIAL PROJECT MAP AND SOIL BORING LOCATIONS

PROJECT
**DAVIDSON ASBESTOS SITE
DAVIDSON, NORTH CAROLINA**

hart hickman
SMARTER ENVIRONMENTAL SOLUTIONS
2923 South Tryon Street - Suite 100
Charlotte, North Carolina 28203
704-586-0007 (p) 704-586-0373 (f)
License # C-1269 / # C-245 Geology

DATE: 5-13-22

REVISION NO: 0

JOB NO: ROW-605

FIGURE NO: 2